REMARKS

The Applicants have carefully reviewed and considered the Office Action of 15 August 2005. In response the Applicants traverse the rejection of the claims without making any amendment to the claims. Upon careful review and consideration of these comments it is believed the Examiner will agree that the presently pending claims patentably distinguish over the prior art and should be allowed.

A. Claims 1–4, 9–13 and 15–23 very clearly patentably distinguish over U.S. Patent 6,135, 747 to Syme et al. when considered in combination with U.S. Patent 6,517,648 to Bouchette et al., U.S. Patent Application US 2003/0061776 A1 to Alderman and U.S. Patent 6,207,738 to Zuckerman et al.

Independent claim 1 of the present application reads on a method of forming an encapsulated fiber batt. The method includes the steps of conveying a fiber batt in a first direction and passing the fiber batt past a melt-blowing assembly which directs polymer melt fibers toward a surface of the fiber batt. Claim 1 further provides that the melt-blowing assembly is arranged and configured to apply a cooling fluid to the polymer melt fibers at a volume and a temperature sufficient to quench a surface portion of a portion of the polymer melt fibers before the polymer melt fibers contact a surface of the fiber batt.

In formulating his rejection the Examiner relies upon the Syme et al. patent as his primary reference. The Examiner notes, however, that the Syme et al. reference "... does not teach applying a cooling fluid to melt-blown fibers to quench a surface portion of melt-blown fibers, while ensuring that the fibers are sufficiently tacky to adhere to a surface of a fiber batt." The Examiner argues, however, that it would have been obvious in the art to cool the melt-blown fibers as set forth in present claim 1 since (a) the Alderman reference teaches providing a layer of phase change material (PCM) onto a surface of an insulating batt and (b) Bouchette et al. teaches it is old in the art to incorporate PCM particles to melt-blown fibers by spraying cooling water containing PCM onto melt-blown fibers. Further, the Examiner argues that the Zuckerman et al. reference teaches that it is old in the art to coat a fibrous web with a composition containing a PCM.

While the combination of references proposed by the Examiner might initially appear feasible, it cannot withstand close scrutiny and it is clear that the rejection is improper and should be withdrawn.

More specifically, the primary reference to Syme et al. explicitly provides that heated pressurized air is supplied and delivered through the angled orifices 49 provided adjacent the extrusion aperture 51 through which the melt-blown fibers are directed toward the mat (see particularly, for example, col. 6 lines 3–6 and lines 53–60). As described at col. 7 lines 8–23 and clearly illustrated in Figure 6, the extruded fibers 17 are applied hot and only allowed to cool after they have

reached the surface of the batt 67. This is an essential teaching of the Syme et al. reference as it is the cooling of the fibers 17 after contact with the surface of the batt 67 that causes the ends 70 of the fibers to lock on adjacent batt fibers 68 thereby providing the interlocking attachment and impregnation of the batt surface.

In the instant case, the Examiner proposes modifying the procedure disclosed in the Syme et al. patent by spraying cooling water on the fibers as they fall toward the batt surface in accordance with teachings of the Alderman, Bouchette et al. and Zuckerman et al. references. Clearly, the cooling spray would cause the falling fibers to shrink and the ends to curl before those fibers were in engagement with the underlying batt. Thus, the modification proposed by the Examiner is clearly in direct conflict with the explicit teaches of the primary reference to Syme et al. In fact, the proposed modification would render the prior art invention disclosed in the Syme et al. patent unsatisfactory for its intended purpose. Thus, there is no suggestion or motivation to make the proposed modification. See MPEP section 2143.01, p. 2100-131 and *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Further, the proposed modification or combination of the prior art would change the principle of operation of the Syme et al. reference. Thus, the teachings of the references are not sufficient to render the claims *prima facie* obvious. See MPEP section 2143.02 at p. 2100-132 and *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Stated another way, the primary reference to Syme et al. explicitly teaches that the extruded fibers 17 being applied to the underlying batt 18 are not cooled until after they are in contact with the batt. The Syme et al. patent explicitly teaches that this is necessary in order to provide the interlocking attachment and impregnation of the batt surface. The present invention as set forth in claim 1, relating to the applying of a cooling fluid to the polymer melt fibers before the polymer melt fibers contact a surface of the fiber batt, is contraindicated by the teachings of the Syme et al. reference. Thus, the primary reference to Syme et al. diverges from and teaches away from the present invention and the secondary references do nothing to alter this fact. It is well established that it is error to find obviousness in such a factual situation. See *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 220 USPQ 303, 311 (Fed. Cir. 1983) and *In re Fine*, 5 USPQ2d 1596, 1599 (Fed. Cir. 1988). Accordingly, the proposed rejection is improper and claim 1 should be allowed.

Claims 2–4 and 9–13 which depend from claim 1 and are rejected on the same grounds are equally allowable for the same reasons.

Independent claim 15 reads on a method of forming a plurality of encapsulated fiber batts. Claim 15 explicitly provides that the second melt-blowing assemblies are arranged and configured to apply a cooling fluid to the polymer melt fibers at a volume and a temperature sufficient to quench a surface portion of a portion of the polymer melt fibers before the polymer melt fibers contact a surface of the fiber batt. As noted above, such a step as set forth in

claim 15 is clearly contraindicated by the primary reference to Syme et al. Further, the secondary references cited by the Examiner do nothing to address this shortcoming of the primary reference. Thus, independent claim 15, like claim 1 patentably distinguishes over this art and should be allowed.

Claims 16–23 which depend from claim 15 and are rejected on the same grounds are equally allowable for the same reasons.

B. Claims 5–8 and 14 patentably distinguish over the Syme et al., Bouchette et al., Alderman and Zuckerman et al. references when considered in further combination with U.S. Patents 6,191,057 to Patel et al. and 3,955,031 to Jones et al.

As noted above, the primary reference to Syme et al. explicitly teaches that the extruded fibers 17 being applied to the underlying batt 18 are not to be cooled until they contact the batt. This is necessary to allow the ends 70 of the fibers 16 to lock onto adjacent batt fibers 68 thereby providing the interlocking attachment and impregnation of the batt surface. In contrast, the present invention as set forth in independent claim 1 from which claims 5–8 and 14 depend explicitly requires the application of a cooling fluid to the polymer melt fibers at a volume and temperature sufficient to quench a surface portion of a portion of the polymer melt fibers before those fibers contact the surface of the fiber batt. This step is absolutely and completely contraindicated by the primary reference to Syme et al. None of the secondary references cited by the Examiner, including Patel et al. and Jones et al., address or overcome this shortcoming.

Thus, claims 5–8 and 14, like independent claim 1, clearly patentably distinguish over the cited art and should be allowed.

In summary, all the pending claims patentably distinguish over the prior art and should be allowed. Upon careful review and consideration of the remarks presented in this document, it is believed the Examiner will agree with this proposition. Accordingly, the early issuance of a formal Notice of Allowance is earnestly solicited. Any fees required in connection with this Response may be debited to Deposit Account 50-0568.

Respectfully submitted,

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